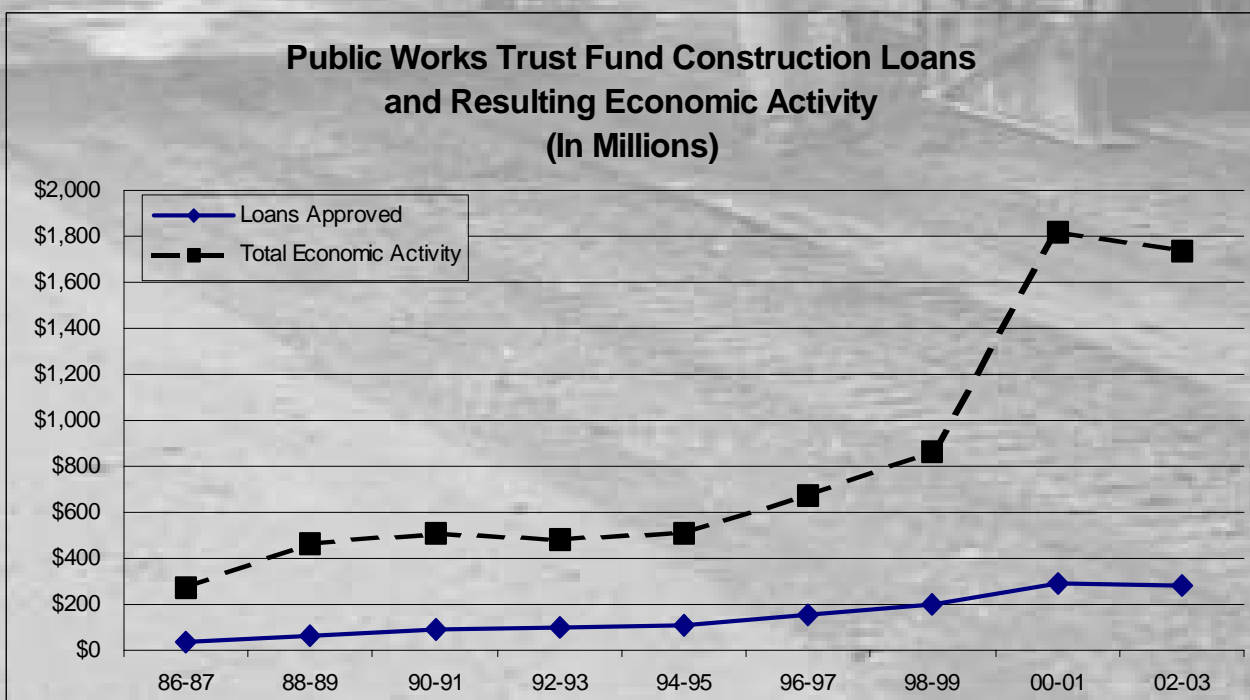


Washington State Public Works Board

Investing In Washington February 2003



Report prepared by Public Works Board Staff:

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**Washington State
Public Works Board**

Post Office Box 48319
Olympia, Washington 98504-8319

March 5, 2003

Dear Reader:

The 2003 Investing in Washington report updates the report done in 1993. It describes the resources that the Public Works Trust Fund's Construction Program has invested in the state over the past 18 years and illustrates the economic activity generated by that investment in the construction industry.

It is important to note that the primary reasons for the Board's investment are to ensure public health and safety and to promote a healthy environment throughout the state. However, the Board felt that it was necessary to demonstrate that these investments have had an impact on the state's economy and that the impact continues to grow with each passing biennium.

The Board hopes that you find the report informative, and, if you have any questions, please don't hesitate in contacting us. You can reach us at (360) 725-5000 or you can e-mail our Executive Director at john.larocque@pwb.wa.gov. We would be delighted to discuss the report and our future plans to assess the performance of the program. Your thoughts and suggestions would be appreciated.

Thank you for taking the time to review this document, and the Board looks forward to working with our local governments in the years to come as we finance critical public works projects.

Sincerely,

Glenn Olson
Chair

Washington State Public Works Board Members

Glenn Olson, Chair

Director of Budget and Information Services
Clark County

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Public Works Trust Fund Investing in Washington 2003

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Executive Summary

The 1985 Legislature created the Public Works Assistance Account (PWAA) and the Public Works Board (Board), commonly known as the Public Works Trust Fund (PWTF), to provide financial assistance to local governments for critical public works projects and to encourage self-reliance at the local level. The Legislature went on to authorize four tax sources to capitalize the PWTF and directed the newly formed Board to restrict its financial assistance to loans. The Legislature decided to retain the final authority in selecting projects and has approved each of the construction program loan lists for the past eighteen years.

The information provided in this report deals almost exclusively with the PWTF Construction Loan Program, which was the sole program authorized by the Legislature in 1986. Since that time, the Legislature has added three long-term programs, the Planning Loan Program, the Pre-Construction Loan Program, and the Emergency Loan Program. All of these programs are capitalized through the same means as the Construction Loan Program and all use low-interest loans exclusively. However, because of their nature and relatively small size, their contribution to the PWTF's investment in the state has not been assessed by this report. In 1997, the Legislature directed the Board to work with the Department of Health to administer the Drinking Water State Revolving Fund (DWSRF); the impacts associated with DWSRF have not been included since the program is comprised primarily of federal funds.

The first PWTF Construction Program loans were issued immediately after the 1986 Legislative session. Forty projects in 40 communities were awarded \$17 million in loans. By comparison, in 2002, 64 projects in 57 communities were awarded \$206 million in loans.

The PWTF is entering its nineteenth year of project funding. Through Fiscal Year (FY) 2003, the program has:

- ➔ Collected over \$1.2 billion in resources.
 - \$830.7 million in tax revenue;

- \$383.1 million in loan repayments; and
- \$17.2 million in interest earnings.

➔ Made construction loans of over \$1.3 billion.

A total of 327 jurisdictions out of the approximately 450 jurisdictions eligible to receive PWTF financing have at least one PWTF construction loan. Nearly 1,200 construction loans have been executed in the past 18 years. It is important to note that during the 18 years that the Board has managed the PWTF, it has handled almost 10,000 transactions, made over 2,700 disbursements, and received over 7,200 loan repayments. The Board is proud of its customer's track record of no defaults and only two late payments.

It is important to note that the Public Works Board requires local governments to provide matching funds for all construction projects. At a minimum, the match must equal five percent of the total project cost, but, in many cases, the matching funds may equal or exceed the amount being invested by the Board. In order to illustrate the total project investment and the resulting economic activity, this report combines the Board's investment with the matching funds prior to estimating the economic activity generated by the projects. The Board does not intend to imply that the Board's investment "created" or "leveraged" the matching funds. Those funds were made available to the project at the discretion of the local government and the other financing groups that had resources to invest in the project.

The \$1.3 billion in PWTF monies loaned by the program, and an additional \$1.6 billion in local, state, and federal matching funds, assisted local governments in the construction of their projects. The investment of PWTF funds has resulted in more than the improved public works systems that it was intended to finance. The \$1.3 billion investment has also generated \$7.3 billion in gross economic impacts statewide. Using industry standard software and estimation techniques, the Board estimates a 6:1 return on its investments over the years. This is a particularly significant result given that

the program was designed to promote public health and safety, not economic development.

This report will walk the reader through the funding sources, a brief history of the PWTF, a

description of the programs that comprise the family of programs managed by the Board, the economic impacts achieved, several case studies, and a review of the approach used to make the estimates found in the report.

Purpose

The Board recognized the growing need for information about the impacts of infrastructure financing.

In 2001, as part of the process to find a long-term resource base for the Community Economic Revitalization Board (CERB), the Legislature wanted detailed and reliable information about the economic impacts associated with infrastructure investments. While the PWTF was not assessed during this process, it became evident that the Legislature needed and wanted information about the impacts associated with infrastructure investments.

A similar event occurred in 1993 when the state was experiencing a major economic downturn. As a result of a legislative inquiry in 1992, the Public Works Board completed a report on the economic activity generated by the investments it had made in the first 10 years of the program. The report was well received by the Legislature and interest groups throughout the state.

The Board decided that updating that report would be worthwhile now that ten years have elapsed. While the PWTF programs were

designed to promote public health and safety and for most of the early years, minimized any funding for system expansion or development, the 1993 study clearly indicated that the investment of construction funds had a significant impact on the state's economy.

In 1991, the Legislature added economic growth as a factor that the Board could consider in prioritizing projects. In addition, the Legislature redirected \$21.1 million in the PWTF to economic development projects in rural, resource dependent communities. That program continued through FY 1997.

Though the primary mission of the PWTF has been to repair and replace failing infrastructure, investing hundreds of millions of dollars in one economic sector will produce positive economic impacts, intended or not. By using advanced economic modeling systems, the Board is able to provide the Legislature and other interested groups with realistic estimates of those economic impacts. This report is designed to provide the data in lay-person language and to provide anecdotal information about specific projects that highlight the impacts.

Chapter 1

Introduction

"It is the policy of the state of Washington to encourage self-reliance by local governments in meeting their public works needs and to assist in financing of critical public works projects..." RCW 43.155.010

This statement serves as a preamble for the legislative directive that created the PWTF in 1985. A 1983 study of local infrastructure needs indicated that local governments would face a \$2 billion shortfall in infrastructure financing over a five-year period. This deficit convinced the Legislature that local governments could not keep pace with the growing need to repair and replace water, wastewater, storm sewer, road, and bridge systems. By creating the PWTF, the Legislature offered much needed financial and technical assistance to local governments.

The Legislature went on to capitalize the PWTF with four dedicated revenue sources: excise taxes on water, sewer, and refuse collection as well as a conveyance tax on real estate transactions. According to estimates prepared by the Department of Revenue in 1985, the PWTF could anticipate approximately \$19.5 million annually.

However, neither the Legislature, the Department of Revenue, the Department of Community, Trade and Economic Development, the Board, nor Board staff could have predicted the events that would impact the PWTF revenue during the 20 years between 1982 and 2002.

Public Works Trust Fund Revenue

The 1985 Legislature authorized the PWTF to receive revenue from four tax sources, loan repayments, and interest earnings generated on funds in the account. The Department of Revenue projected that the fund would receive approximately \$19.5 million in the first year and would continue to rise at a modest pace for the next ten years.

With the exception of the first year, actual revenue has exceeded projections. In FY 1992, six years after the program began; tax revenue reached \$36.4 million, more than double the first year's revenue. Table 1 and Figure 1 illustrate the steady climb in revenue in each biennium.

Ten years into the program, revenue from taxes was \$46.8 million a year. By 2003, tax revenue will be approximately \$70 million, a noteworthy increase. However, the most dramatic growth in resources has been and will continue to be through loan repayments. With nearly 1,200 construction loans executed and with interest rates ranging from 0.5 – 3.0 percent, the principal and interest payments for 2003 are expected to be \$60 million, nearly equaling all of the tax revenue. The unparalleled growth and success of the program is due in large part to the Legislature limiting the Board to using loans as its only investment tool.

The conveyance tax on real estate and refuse collection are responsible for the dramatic increase in tax revenue. Property values and real estate sales soared in the late 1980's and throughout the 1990's. In 1990, the conveyance taxes drove the PWTF revenue to unexpected heights, single-handedly accounting for more than the \$20.3 million projection of the total tax revenue for that year, and it is projected to be \$34.5 million in FY 2003. Refuse collection rates began to escalate in 1987 as labor, transportation, and associated costs rose. Higher rates generated more excise taxes, and the PWAA grew as shown in Table 1.

The influence of two other sources of revenue is also illustrated in Table 1, loan repayments and interest earned on the loans made with PWTF monies. The Legislature anticipated loan repayments and directed that they be deposited into the PWAA. In 1992, the Legislature reviewed the investment earnings of several programs and determined that the interest earned by the PWAA was needed to help balance the state's general fund, and the earnings were redirected to the state's General Fund account starting in FY 1993.

Revenue generated by the combination of taxes and repayments grew nearly every year, with more than \$129 million expected in FY 2003. The PWTF has exceeded the most optimistic projections for the 18 years of operation, receiving over \$830.7 million from tax revenues, \$17.1 million from investment earnings, and \$383.1 million from loan repayments for a total of \$1.23 billion. These figures translated into steadily higher loan issuances, and in 2002, reached \$206 million, over 12 times the amount available during the PWTF's inaugural year.

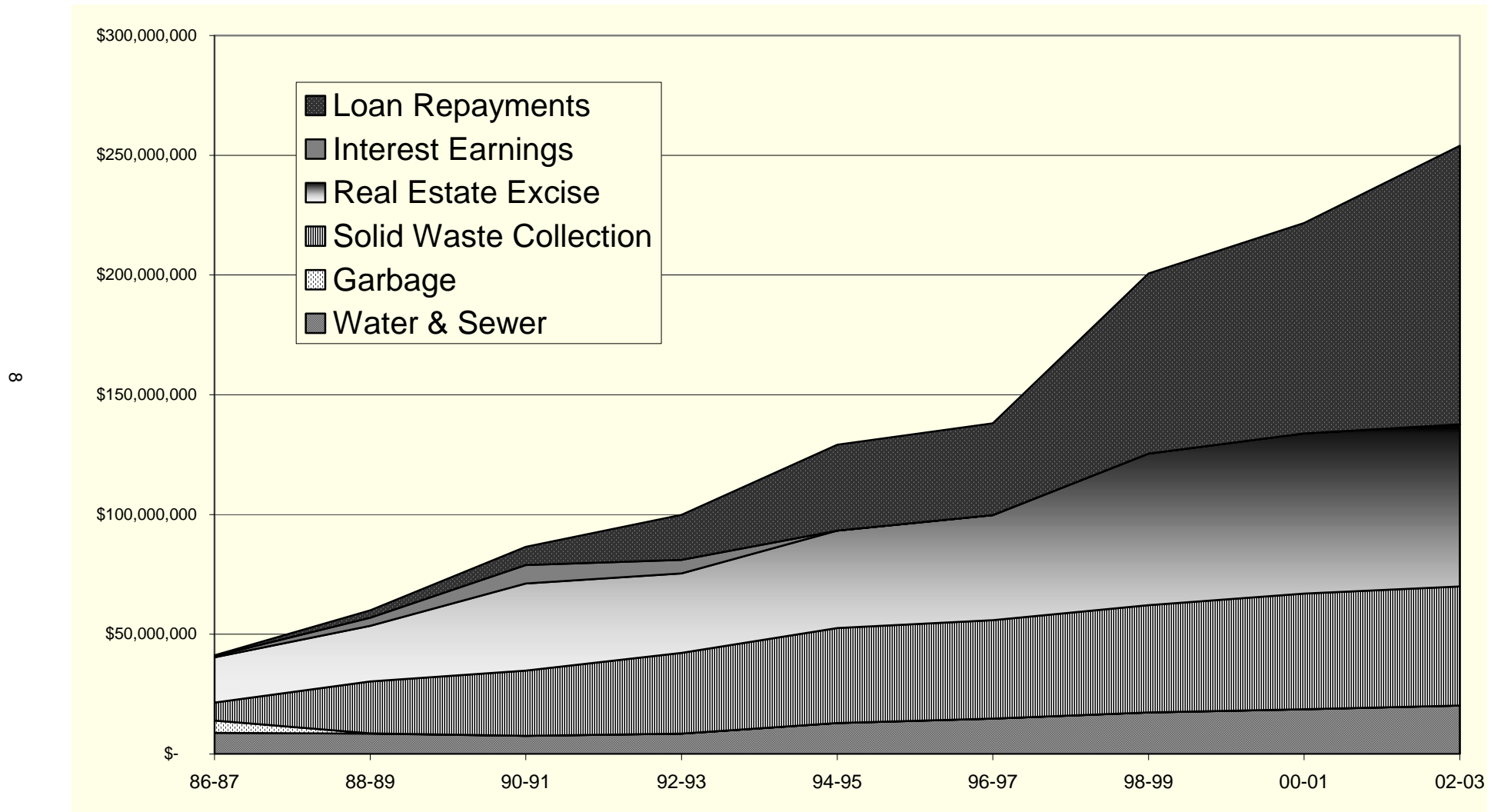
Table 1
Public Works Assistance Account Revenue
(In Thousands)

| | 86-87 (1) | 88-89 | 90-91 | 92-93 | 94-95 | 96-97 | 98-99 | 00-01 | 02-03 (2) | Totals |
|------------------------|-----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-------------|
| Revenue | | | | | | | | | | |
| Taxes | | | | | | | | | | |
| Water & Sewer | \$8,799 | \$8,477 | \$7,639 | \$8,486 | \$12,949 | \$14,842 | \$17,391 | \$18,731 | \$20,259 | \$117,573 |
| Garbage (3) | \$5,210 | \$147 | \$(42) | \$4 | \$(1) | \$0 | \$0 | \$0 | \$0 | \$5,318 |
| Solid Waste Collection | \$7,497 | \$21,653 | \$27,264 | \$33,715 | \$39,637 | \$41,058 | \$44,802 | \$48,240 | \$49,694 | \$313,560 |
| Real Estate Excise | \$18,883 | \$23,291 | \$36,364 | \$33,231 | \$40,700 | \$43,884 | \$63,242 | \$66,928 | \$67,748 | \$394,271 |
| Subtotal | \$40,389 | \$53,568 | \$71,225 | \$75,436 | \$93,285 | \$99,784 | \$125,435 | \$133,899 | \$137,701 | \$830,722 |
| Interest Earnings (4) | \$524 | \$3,322 | \$7,661 | \$5,654 | \$0 | \$0 | \$0 | \$0 | \$0 | \$17,161 |
| Loan Repayments | \$283 | \$3,066 | \$7,593 | \$18,743 | \$35,886 | \$38,269 | \$75,252 | \$87,810 | \$116,221 | \$383,123 |
| Total Account | \$41,196 | \$59,956 | \$86,479 | \$99,833 | \$129,171 | \$138,053 | \$200,687 | \$221,709 | \$253,922 | \$1,231,006 |

NOTES:

- (1) All years listed are fiscal years.
- (2) Includes estimated figures for FY 2003 Construction Loan List.
- (3) The Garbage Tax was repealed.
- (4) Interest earnings were redirected to the State General Fund starting in FY 1993.

Figure 1
Public Works Trust Fund Revenues



Demand for Financing Through the Public Works Trust Fund

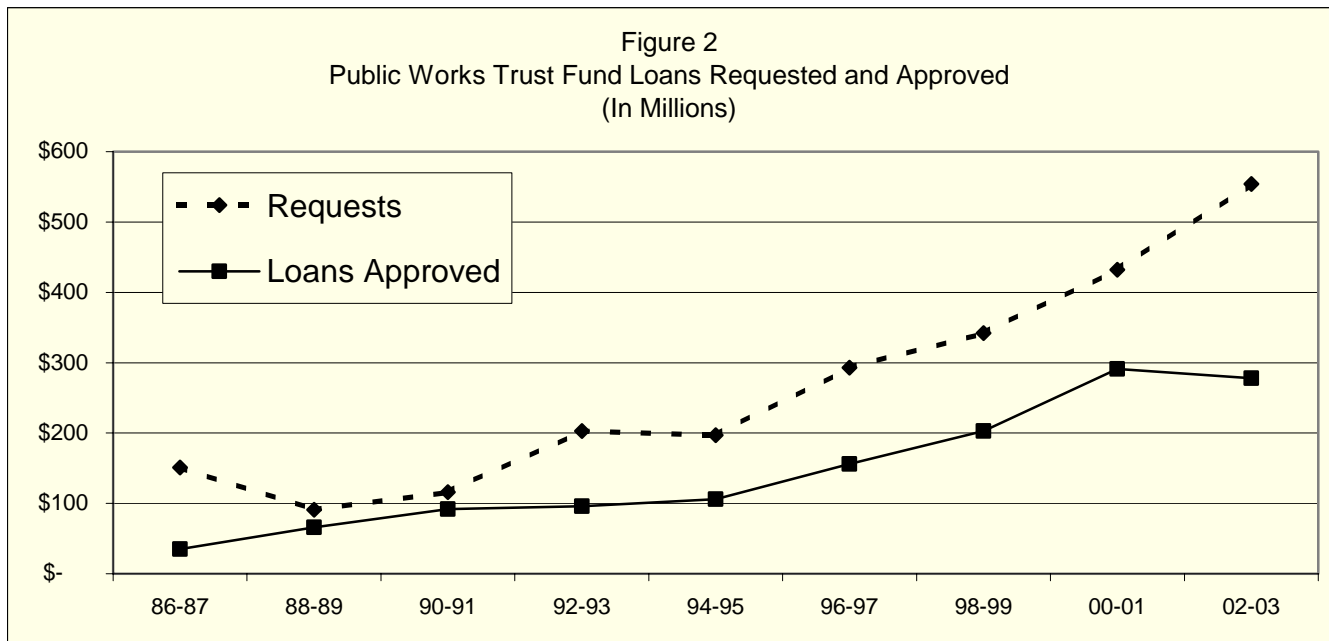
The PWTF was created to help meet the need identified in the 1983 infrastructure study. Local governments faced a \$2 billion shortfall in financing for critical public works projects. While there was a demonstrated need, no one was quite sure how the local governments would respond to a program that provided loans as the only alternative.

Figure 2 demonstrates that after the initial surge of requests, demand closely mirrors available resources, holding at about a \$2 in demand for

every available \$1 ratio until the 97-99 biennium. The Board adjusted the interest rates on its construction loan during that biennium to bring them back into alignment with current bond rates. This rekindled interest in the PWTF with the resulting peak in applications during the 2001-03 biennium.

The Board anticipates that the growth in demand will continue to accelerate. Estimates range from \$600 to \$800 million in requests during the 2003-05 biennium. With under \$275 million in resources projected for that biennium, demand is likely to exceed the \$2 to \$1 ratio and may approach a \$3 to \$1 level.

Figure 2
Public Works Trust Fund Loans Requested and Approved
(In Millions)



Chapter 2

Public Works Trust Fund Program History

As noted previously, this report will focus solely on the economic impacts of the PWTF Construction Loan Program. However, it is important to note that the Board manages a wider array of linked programs, all of which have direct ties to the PWAA. The following is a brief description of the five programs.

Construction Loan Program

The Construction Loan Program is the primary program associated with the PWAA. It was the inaugural program, and its focus was set by the 1983 Local Government Infrastructure Needs Assessment. It was brought into being by the 1985 Legislature, and, while it has undergone minor revisions, the Construction Loan Program remains almost identical to the program created almost 20 years ago.

The program allows the Board to loan money to counties, cities, and special purpose districts for making improvements to their domestic water, sanitary sewer, storm sewer, solid waste/recycling, and roads/bridge systems. Solid waste and recycling is the only system that has been added to the eligible systems.

The program may finance a project from its inception to its completion. Funding limits and related policies are set by the Board, and the Board must make a recommendation to the Legislature each year regarding the construction projects to be financed. The Legislature must approve the list, as it has done for the past 18 years.

A minimum of 85 percent of each biennium's appropriation must be committed to financing construction projects. The balance of the resources may be used to finance the other three programs directly funded through the PWAA.

To date, the Legislature has approved almost 1,200 loans and committed over \$1.2 billion in financing for these local projects. In the past 18 years, there has never been a default on a loan and on only two occasions has a payment been late. Local governments consider the PWTF Construction Loan Program one of their primary

financing tools, and each year, the Board receives requests for more than twice the amount of money it has to commit.

In 2001, the Board began working the funds that were "resting" in the PWAA by recommending to the Legislature that it use an Accelerated Loan Commitment (ALC) model to finance 27 projects at \$93 million. The Legislature reviewed the recommendation and agreed with the Board. The 27 projects were financed and are now well on the way to completion. The Board repeated this recommendation in 2003 with \$58 million to finance 19 projects. The acceleration allows projects to begin construction and requires the Board and its staff to manage the fund very closely. The infusion of over \$150 million over the three year period not only allows 46 projects to be undertaken, but puts as much as \$700 million into the state's economic activity.

Table 2 illustrates the steady increases in the amount of PWTF Construction loans approved since 1986. Table 3 illustrates PWTF activity for the Construction Loan program since 1986 within each county.

Table 2
Public Works Trust Fund
Construction Loan Approval History
(In Thousands)

| | 86-87 (1) | 88-89 | 90-91 | 92-93 | 94-95 | 96-97 | 98-99 | 00-01 | 02-03 (2) | Totals |
|--|-----------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|
| Construction Loans Approved (3) | | | | | | | | | | |
| PWTF Loans | \$ 34,577 | \$ 65,964 | \$ 91,511 | \$ 95,961 | \$ 106,202 | \$ 156,278 | \$ 202,834 | \$ 290,521 | \$ 277,685 | \$ 1,321,533 |
| % of Project Funding | 43% | 44% | 53% | 55% | 55% | 60% | 59% | 38% | 37% | 46% |
| Matching Funds | \$ 45,169 | \$ 82,555 | \$ 81,804 | \$ 77,929 | \$ 86,418 | \$ 105,425 | \$ 142,640 | \$ 473,431 | \$ 463,371 | \$ 1,558,742 |
| % of Project Funding | 57% | 56% | 47% | 45% | 45% | 40% | 41% | 62% | 63% | 54% |
| Total Funding | \$ 79,746 | \$ 148,519 | \$ 173,315 | \$ 173,890 | \$ 192,620 | \$ 261,703 | \$ 345,474 | \$ 763,952 | \$ 741,056 | \$ 2,880,275 |

NOTES:

(1) All years listed are fiscal years.

(2) Includes estimated figures for FY 2003 Construction Loan List.

(3) Figures are taken from PWTF Annual Reports to the Legislature.

Table 3
Public Works Trust Fund Activity Within Each County (1)
(In Thousands)

| County (2) | 86-87 (3) | 88-89 | 90-91 | 92-93 | 94-95 | 96-97 | 98-99 | 00-01 | 02-03 (4) | Totals |
|---------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|--------------------|
| Adams | \$0 | \$573 | \$0 | \$0 | \$0 | \$2,756 | \$2,393 | \$385 | \$0 | \$6,107 |
| Asotin | \$481 | \$0 | \$2,761 | \$1,028 | \$0 | \$0 | \$1,250 | \$1,620 | \$0 | \$7,140 |
| Benton | \$2,000 | \$2,357 | \$4,868 | \$4,793 | \$1,313 | \$7,000 | \$3,817 | \$17,723 | \$12,238 | \$56,109 |
| Chelan | \$396 | \$1,299 | \$2,500 | \$2,405 | \$3,487 | \$4,097 | \$3,125 | \$5,332 | \$6,691 | \$29,332 |
| Clallam | \$0 | \$0 | \$2,500 | \$1,548 | \$240 | \$0 | \$911 | \$3,100 | \$340 | \$8,639 |
| Clark | \$1,000 | \$4,638 | \$4,642 | \$4,630 | \$2,685 | \$4,212 | \$3,582 | \$9,069 | \$17,923 | \$52,381 |
| Columbia | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,550 | \$494 | \$0 | \$3,044 |
| Cowlitz | \$1,345 | \$2,290 | \$1,662 | \$1,375 | \$917 | \$2,047 | \$16,323 | \$11,230 | \$492 | \$37,681 |
| Douglas | \$0 | \$0 | \$891 | \$1,049 | \$0 | \$3,500 | \$0 | \$608 | \$1,936 | \$7,984 |
| Ferry | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Franklin | \$0 | \$1,465 | \$2,500 | \$0 | \$3,500 | \$0 | \$0 | \$2,100 | \$0 | \$9,565 |
| Garfield | \$30 | \$61 | \$0 | \$76 | \$0 | \$0 | \$0 | \$0 | \$0 | \$167 |
| Grant | \$256 | \$537 | \$1,882 | \$1,200 | \$1,500 | \$450 | \$723 | \$0 | \$11,387 | \$17,935 |
| Grays Harbor | \$1,242 | \$714 | \$1,099 | \$0 | \$627 | \$5,000 | \$7,000 | \$0 | \$5,652 | \$21,334 |
| Island | \$709 | \$147 | \$304 | \$988 | \$796 | \$1,926 | \$1,035 | \$677 | \$0 | \$6,582 |
| Jefferson | \$660 | \$0 | \$338 | \$0 | \$0 | \$0 | \$3,970 | \$2,401 | \$1,308 | \$8,677 |
| King | \$6,529 | \$17,013 | \$26,459 | \$22,964 | \$45,233 | \$38,219 | \$37,830 | \$95,536 | \$73,112 | \$362,895 |
| Kitsap | \$252 | \$398 | \$4,098 | \$1,167 | \$12,513 | \$4,130 | \$6,982 | \$18,515 | \$12,026 | \$60,081 |
| Kittitas | \$210 | \$418 | \$608 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,425 | \$3,661 |
| Klickitat | \$74 | \$1,811 | \$1,133 | \$0 | \$269 | \$0 | \$1,213 | \$12,124 | \$0 | \$16,624 |
| Lewis | \$384 | \$0 | \$1,279 | \$4,297 | \$1,630 | \$724 | \$1,852 | \$1,992 | \$3,374 | \$15,532 |
| Lincoln | \$0 | \$0 | \$366 | \$587 | \$1,008 | \$765 | \$903 | \$0 | \$0 | \$3,629 |
| Mason | \$404 | \$1,170 | \$427 | \$3,500 | \$0 | \$1,311 | \$3,297 | \$0 | \$0 | \$10,109 |
| Okanogan | \$448 | \$300 | \$0 | \$1,806 | \$502 | \$0 | \$4,362 | \$2,446 | \$1,103 | \$10,967 |
| Pacific | \$786 | \$0 | \$0 | \$0 | \$261 | \$194 | \$2,470 | \$1,778 | \$0 | \$5,489 |
| Pend Oreille | \$140 | \$0 | \$300 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$440 |
| Pierce | \$633 | \$628 | \$709 | \$5,822 | \$458 | \$16,561 | \$12,659 | \$20,501 | \$31,664 | \$89,635 |
| San Juan | \$703 | \$0 | \$670 | \$0 | \$0 | \$0 | \$0 | \$0 | \$5,560 | \$6,933 |
| Skagit | \$2,000 | \$1,359 | \$854 | \$351 | \$322 | \$3,500 | \$2,095 | \$12,300 | \$11,000 | \$33,781 |
| Skamania | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Snohomish | \$117 | \$6,848 | \$9,466 | \$12,368 | \$9,053 | \$15,283 | \$15,972 | \$23,874 | \$47,333 | \$140,314 |
| Spokane | \$5,303 | \$2,473 | \$4,817 | \$8,278 | \$7,808 | \$12,807 | \$7,172 | \$6,990 | \$4,166 | \$59,814 |
| Stevens | \$0 | \$369 | \$2,356 | \$1,458 | \$0 | \$7,000 | \$1,849 | \$0 | \$0 | \$13,032 |
| Thurston | \$1,101 | \$2,275 | \$3,610 | \$2,647 | \$408 | \$0 | \$5,153 | \$9,996 | \$0 | \$25,190 |
| Wahkiakum | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,749 | \$0 | \$0 | \$0 | \$1,749 |
| Walla Walla | \$0 | \$114 | \$0 | \$0 | \$0 | \$0 | \$14,000 | \$800 | \$5,159 | \$20,073 |
| Whatcom | \$1,123 | \$2,828 | \$1,681 | \$1,556 | \$315 | \$4,918 | \$4,755 | \$726 | \$9,192 | \$27,094 |
| Whitman | \$699 | \$976 | \$645 | \$0 | \$168 | \$1,194 | \$977 | \$394 | \$0 | \$5,053 |
| Yakima | \$2,502 | \$7,702 | \$4,054 | \$4,342 | \$6,449 | \$6,436 | \$11,356 | \$19,415 | \$5,159 | \$67,415 |
| Totals | \$31,527 | \$60,763 | \$89,479 | \$90,235 | \$101,462 | \$145,779 | \$181,576 | \$282,126 | \$269,240 | \$1,252,187 |

NOTES:

- (1) Figures are from the Public Works Trust Fund database and include only executed Construction loans within each county.
- (2) Each figure includes all jurisdictions within a county.
- (3) All years listed are fiscal years.
- (4) The 2003 figures are from the Loan List submitted to the Legislature for approval.

Pre-Construction Loan Program

During the 1995 Legislative session, the Legislature passed and the Governor signed HB 2063. This law authorizes the Board to make low-interest loans to local governments for pre-construction activities on public works projects.

To best meet the needs of local governments, Board staff surveyed selected local government officials throughout the state and presented program options to the Board. In August 1995, the Board adopted program policies and determined that the following types of activities would be eligible for funding under this program:

- Design and Engineering
- Bid-Document Preparation
- Environmental Studies
- Right-Of-Way Acquisition

Loans are offered at the same rates as the PWTF Construction Loan Program, which ranges from 0.5 - 2.0 percent depending on the local jurisdiction contribution, has terms of five years, up to 20 years if construction funding is secured by the second loan payment.

To date, in the 2001-03 Biennium, 48 loans have been awarded to 29 cities, 11 special purpose districts, and 2 counties totaling \$22,110,339.

Since 1995, the Board has approved 169 Pre-Construction loans totaling \$51,185,890.

Emergency Loan Program

In 1987, The Board became aware of the need of its local government clients to have access to financial assistance for public works emergencies. The Board advocated changes in its statute to establish an emergency loan program that was designed to provide timely financial assistance to clients. The Legislature and the Governor approved the program in 1988.

The Board has defined an emergency as:

“A public works project made necessary by a natural disaster, or an immediate and emergent threat to the public health or safety due to unforeseen or unavoidable circumstances.”

Since then, 52 PWTF Emergency loans valued at \$9,922,722 have been executed.

Planning Loan Program

Since the inception of the PWTF in 1985, emphasis has been placed on the importance of planning as an effective management tool.

Over time, the PWTF has phased in the current requirement that each applicant has a Capital Facilities Plan (CFP) for all PWTF-eligible systems that they own and operate. To help clients meet this requirement, the Board developed the Capital Improvement Plan (CIP) Loan Program.

In 1989, the first CIP loans became available. These were originally zero-interest loans for up to \$15,000. The lid was later increased to \$30,000. In 1992, the program's name was changed to the Capital Facilities Planning Loan Program to be consistent with language in the Growth Management Act (GMA).

During the 1993 session, legislation passed which authorizes the Board to make Capital Facilities Planning Loans available year round, without annual legislative approval of the projects. This change made the program more attractive to PWTF clients, particularly those in counties operating under the GMA.

Effective January 1, 1996, the Board adopted the same Capital Facilities Planning standards

as those required under the GMA. These standards apply to all counties, cities, and special purpose districts in Washington State, not just those planning under the GMA. By adopting the GMA standards, the Board has created consistent standards for CFPs throughout the state, simplifying the planning process for local governments.

In August of 1999, the Board authorized changes to the Capital Facilities Planning Loan Program in order to make it more accessible to local governments. The Board expanded the program by adjusting the eligible activities, eligible applicants, and the terms of the loans. It is now known as the Public Works Planning Loan Program.

Current loan terms are:

| | |
|----------------|----------|
| Cycle: | Open |
| Loan Limit: | \$50,000 |
| Interest Rate: | 0% |
| Local Match: | 0% |
| Loan Term: | 6-years |

Since 1989, the PWTF has authorized 70 planning loans totaling \$1,800,221.

Drinking Water State Revolving Fund (DWSRF)

The Drinking Water State Revolving Fund (DWSRF) is a federally funded program designed to assist public and private water systems become compliant with new, more restrictive standards imposed by the Safe Drinking Water Act. In order to qualify for the funding, a state must provide a 20 percent match. In 1997, the Legislature decided to accept the federal funds and to use the PWAA to provide the matching funds.

The Legislature went one step farther in linking the DWSRF with the PWTF. It directed the Department of Health (DOH) to be the state's primary agency, but instructed DOH and the Board to work closely together to administer the program. The intent was to institute a model program that would meet the federal requirements, focus on the priorities established by DOH, and be as "user-friendly" as the Board could make it.

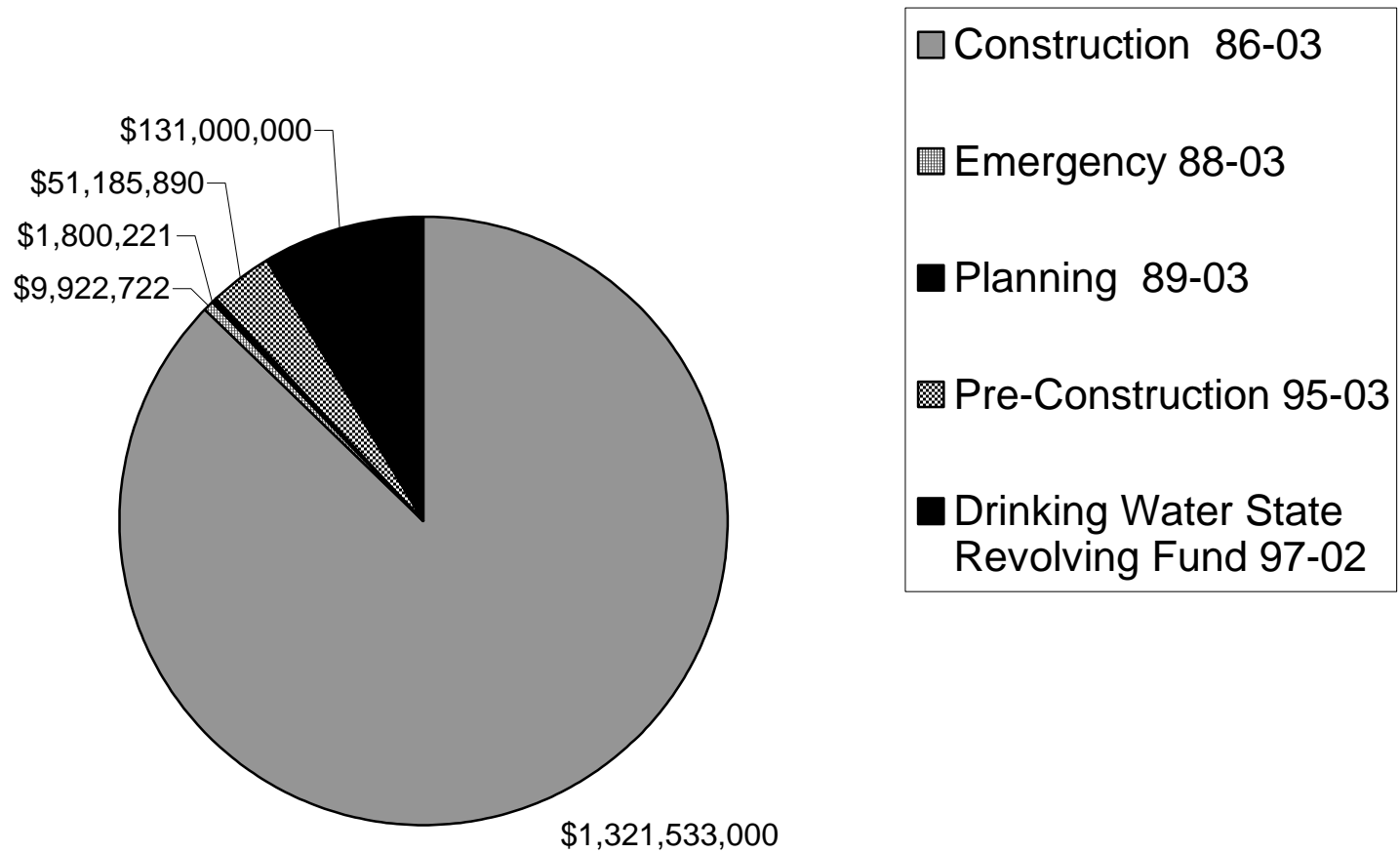
That directive has been successfully implemented as evidenced by the response from public and private water systems within the state. The number of applications and the amount of loan funds being requested has

steadily grown. The Department of Health has been able to direct the resources to the issues that are most pressing within the state, and the Council of Infrastructure Financing Authorities continue to highlight Washington State as a model of success with regard to this program.

The program has steadily grown in size and is now a significant component of the infrastructure financing system in Washington State. The loan list for 2003 contains over 40 projects and commits more than \$33 million. Like the PWTF, all of the financing comes in the form of loans. In 2002, the Board billed for and received over \$3 million in loan repayments from over 100 contractors. One organization notified the Board that it would be late with its payment and subsequently made that payment and the fee resulting from being late.

Figure 3 illustrates the total amount of loans approved and the relative proportions and amounts for each program.

Figure 3
Public Works Trust Fund Loans Approved
\$1,515,441,833



The Economic Impact of the Public Works Trust Fund

Understanding Economic Impacts

The Board wanted to provide credible information about the gross economic impacts that the investments it has made have had on the state's economy. To do this, it requested that the Department of Revenue (DOR) employ the Washington State Implan model. Implan input-output models, from Minnesota Implan Group, Inc., are frequently used for state and local impact modeling and an earlier version was used for the 1993 report.

It is important to note, that when considering the gross economic impacts associated with investing large sums of money, three levels of impacts are considered. The direct impacts relate to the construction contracts themselves that pay for salaries, fees, material, and the like. The indirect impacts relate to the production of material, transportation costs, equipment purchases, etc. The induced impacts are those associated with workers buying groceries, gasoline for their cars, and similar transactions. The results provide the reader with a picture of the economic activity generated by the investments.

Has the Public Works Trust Fund Promoted Economic Growth?

Yes. Through the PWTF, the state has invested over \$1.3 billion in construction activities and influenced economic growth. However, this growth must be considered the natural outcome of large-scale construction projects rather than the result of targeted investments designed to stimulate economic growth. The PWTF was not designed or managed as an economic development tool. Had it been, the criteria for selecting projects would have been oriented towards economic development rather than public health and safety, or environmental issues. Until 1991, the economic benefit of a project was subordinate, almost to exclusion, of these issues.

For example, in the application grading process, a jurisdiction needing to repair a length of water main to eliminate potential infiltration of contaminants would receive significantly higher need scores than would be awarded if the same

jurisdiction wanted to replace the same pipe to ensure adequate water pressure to prevent the closure of a mill. The same jurisdiction that planned to enlarge the pipe to provide water solely to attract a new food processing plant would not have been eligible for the PWTF.

As quantified in Table 1, the PWTF responded to legislative intent and collected over \$830 million in tax revenue, earned over \$17.1 million in interest, and accumulated over \$383 million in loan repayments.

Also, it is the legislative intent to encourage self-reliance by local governments in meeting their public works needs. To accomplish this, the Board requires local financial participation, and provides incentive (through lower interest rates) for borrowers to increase their matching funds. As shown in Table 2, this has led to an additional \$1.6 billion in matching funds being used on the 1,184 construction projects funded by the Board. The level of investment could not help but have a positive impact on the economy.

Estimating the gross economic impacts of a program like the PWTF requires the use of an economic modeling tool. Implan Washington was used to model the 2003 PWTF loan package to estimate its gross economic impacts. Appendix A describes the software and modeling process it followed.

Table 4 shows the projected gross economic impacts of the 2003 PWTF loans, as performed by DOR. The employment figures represent some 670 to 840 jobs a year for the four to five year impact period and are transitory construction-related positions that tend to disappear shortly after the construction spending stops.

Table 4
Gross Economic Impact Statewide
of the 2003 Public Works Trust Fund Loans
(In Millions of 2002 Dollars and FTEs)

| Project Completion Date | 2003 – 2005 | 2006 – 2007 |
|--|-------------|-------------|
| Economic Activity (Output) | \$233 | \$96 |
| Construction-Related Employment (Full Time Equivalent) | 2,430 | 920 |

Implan Washington's model distributed the \$146.8 million (the 2003 Loan list of \$71.7 million plus the \$75.1 million in other state, federal, and local funds) to the various sectors of the economy that are directly affected by infrastructure construction. As noted in Table 4, Implan Washington estimates that 3,350 jobs will be created as a direct result of the 27 projects financed in 2003.

The allocation of \$71.7 million from the PWTF will result in a direct investment of \$146.8 million in Washington's economy. The investment will result in \$182.2 million in additional economic activity, for a total of \$329 million.

It could be estimated that every PWTF dollar yields an additional \$3.60 in economic activity in the state. Approximately \$1.05 of that represents the matching funds from state, federal, and local sources. The remaining \$2.55 is in indirect and induced activity generated by the \$2.05 (\$1.00 – PWTF and \$1.05 – matching) investment.

Assuming that 2003 is a representative year, the economic impacts over the life of the PWTF can be easily estimated. Table 5 shows the total industrial output and total Full-Time Equivalent jobs (FTEs) created for each biennium, an extrapolation done by Board staff, based on the work done by DOR. Again, the FTEs shown represent transitory, construction-related positions.

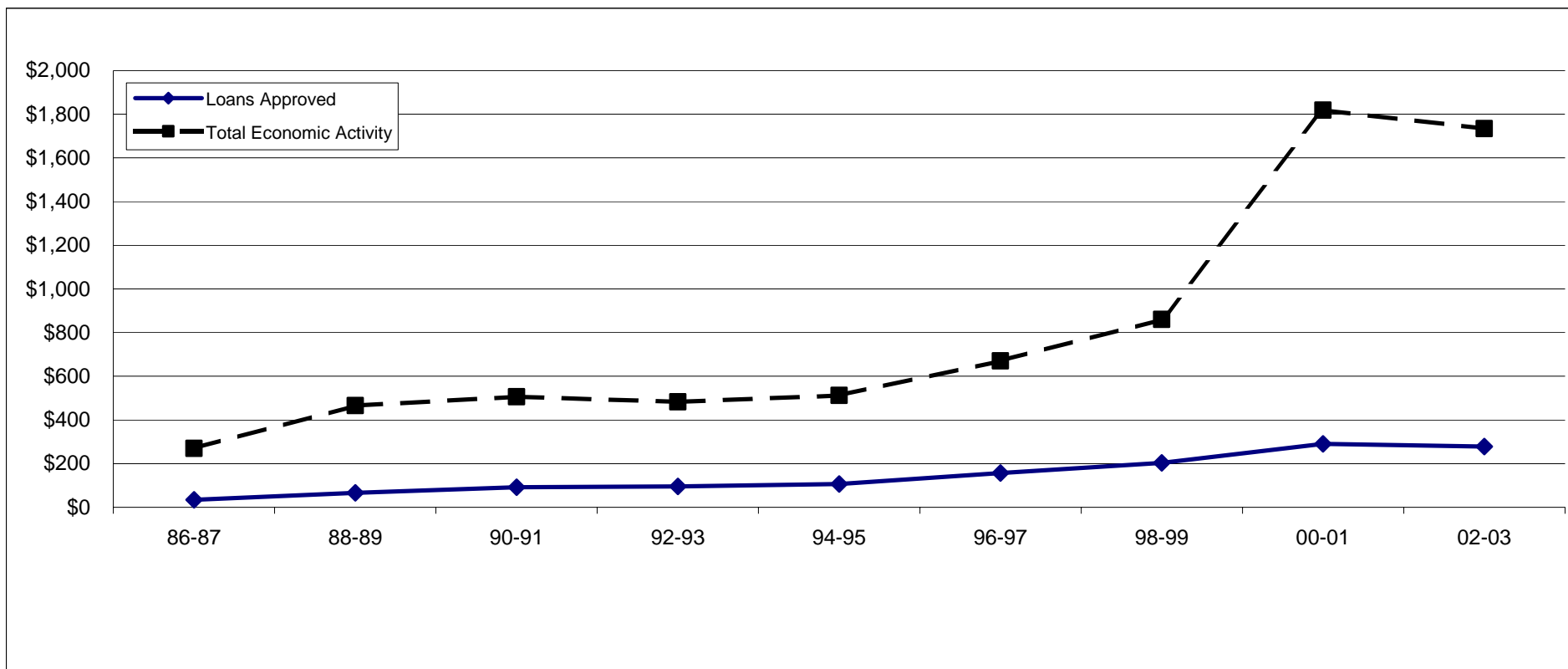
Table 5
Estimated Gross Impacts Over the Life
of the Public Works Trust Fund
(In Millions of 2002 Dollars and FTEs)

| | 86-87 | 88-89 | 90-91 | 92-93 | 94-95 | 96-97 | 98-99 | 00-01 | 02-03 |
|---|-------|-------|-------|-------|-------|-------|-------|---------|---------|
| Economic Activity (Output) | \$270 | \$465 | \$507 | \$483 | \$512 | \$671 | \$860 | \$1,819 | \$1,734 |
| Construction-Related Employment (Full Time) | 2,630 | 4,538 | 4,940 | 4,710 | 4,995 | 6,539 | 8,385 | 17,737 | 16,907 |

Figure 4 graphically shows the amount of PWTF loans approved by the Legislature and

the gross economic impacts the approved loans generated, as estimated by Board staff.

Figure 4
Public Works Trust Fund Construction Loans
and Resulting Economic Activity
(In Millions)



Can the Economic Activity be Attributed to the Public Works Trust Fund?

The answer is both yes and no. Yes, the PWTF acted as a catalyst, inducing local governments to act on critical public works needs. The availability of \$1.3 billion in low interest loans and the additional \$1.6 billion from state, federal, and local sources provided the funds needed for completing the projects. Direct economic impacts represent approximately 40 percent of the \$7.32 billion (2002 dollars) in economic activity generated since 1986.

Examples of economic activity include construction companies buying material, equipment, and other supplies from manufacturers throughout the state and workers spending their salaries on food, shelter, entertainment, and other commodities.

On the other hand, given the critical nature of the infrastructure projects financed by the PWTF, it must be assumed that the vast majority of the projects would have been done with or without the PWTF's investment. Local governments would have had to finance these projects either out of their own reserves or through the same state and federal programs that are listed above as matching funds. The economic activity relates to large-scale construction and would have occurred regardless of where the funds originated. Therefore, the economic activity must be considered a positive, but secondary outcome of the PWTF's effort to meet its primary objective, financing critical, local public works projects.

Could the Economic Impact of the Public Works Trust Fund be Enhanced?

As noted throughout this document and more importantly in the statute that authorizes the PWTF, the primary focus of the program is to promote the health and safety of the public and the environment. While the Legislature has allowed the Board to consider economic activity as a factor in determining the priority list, economic impact remains an outfall rather than a driver in the selection of projects.

In 1991 the Legislature recognized that public works projects could stimulate local economies in several ways. First, the infusion of millions of

dollars for infrastructure construction in distressed communities would result in the economic activity described above. Second, improved infrastructure could sustain, expand, and attract businesses.

As a result, the Legislature added an economic impact factor for the Board to consider in prioritizing projects to be financed through the PWTF from 1991 to 1997. This consideration was codified in RCW 43.155.070:

"(g) The relative benefit of the project to the community, considering the present level of economic activity in the community and the existing capacity to increase local economic activity in communities that have low economic growth;"

The Legislature redirected \$21.1 million of PWTF monies to this economic development strategy. The Board established a separate loan application and selection process to allocate these funds. From FY 1992 through FY 1997, 27 loans totaling \$21.1 million were awarded to 21 jurisdictions.

In addition, the Legislature in 2002 elected to capitalize CERB by transferring approximately \$19 million from the PWTF to CERB over the next four years. This infusion of funds and the redirection of CERB to a predominantly loan-oriented program, provide local governments with a long-term, stable resource that focuses on economic development. The PWTF can and will continue to use its resources to promote public health and safety and environmental health.

In 2001, House Bill 1785 directed the PWTF to enhance the program's accountability by requiring its borrowers to develop and implement project level performance measures. This new level of accountability has proven to be very useful in identifying some of the residual economic activity that will be spurred by improvements to local infrastructure. While this effort will not enhance economic impacts, it will allow the Board to more accurately measure and report on the impacts that do occur. This anecdotal information may then be used to demonstrate the full range of benefits derived from the investment of PWTF funds each year.

Also in 2001, the Board took a bold step to increase the funding available for projects. It developed the ALC model that allowed it to finance 27 projects at \$93.6 million. Managing the cash flow within the PWAA generated the resources. That \$93.6 million was matched by \$300.5 million in other construction funds, for a total construction budget of \$394.1 million. Using the multiplier developed by the Implan Washington model of 2.34, the total economic activity generated by this decision was \$922.2 million.

The Board finds itself with the same opportunity in 2003 where it is recommending the financing of 19 projects with \$58.2 million through the ALC. Those projects are expected to generate approximately \$61.1 million in other construction funds for a total construction budget of \$119.3 million. Applying the 2.34 multiplier to this figure provides an estimate of \$279.2 million in economic activity resulting from this decision.

It is likely that the Board will be able to use the ALC every other year to augment PWAA revenue. To date, over \$1.2 billion in economic activity will have been generated by the Board's willingness to use ALC. It should be noted that the United States Environmental Protection Agency has recently adopted the ALC as a financing tool for the Drinking Water and the Clean Water State Revolving Funds and has encouraged states to employ the tool to maximize the availability of resources. The Board, with its partner, the Washington State Department of Health, intends to use the ALC for the Drinking Water State Revolving Fund in 2003.

By increasing the amount invested in construction projects each biennium, the Board is increasing the economic impacts of the PWTF. It is through this method, rather than attempting to re-prioritize economic development, that the Board will have the greatest and most sustainable impact not only on the health and safety of the public and it's critical infrastructure, but on the economic vitality of local communities throughout the state.

Chapter 3

Project Case Studies

The following case studies are examples of projects financed by the PWTF in communities across the state. These projects were selected to highlight the economic and environmental benefits the PWTF provides to communities. They are just a few recent projects selected from the 1,184 loans the program has with local jurisdictions. Some of the projects have been completed, some are in the midst of construction, and some are included on the 2003 Recommended Construction Loan List to be approved by the Legislature.

If you would like more information about these, or any other projects, you can access the Board's website at <http://www.pwb.wa.gov> or call the Board staff at (360) 725-5000.

City of Bremerton Sanitary Sewer/Storm Sewer 2003

- The City of Bremerton is on the 2003 list of projects and has requested \$475,000 for the design and construction of the Anderson Cove Combined Sewer Overflows (CSO) Basin improvements. This project will construct all of the remaining CSO reduction facilities within the Anderson Cove Basin as ordered by the Department of Ecology in 1993. The city is required to reduce CSO events to one per year.
- The project will help restore a healthy habitat for threatened salmonids, other fish, and invertebrates. The Bremerton-Kitsap County Health District has issued closure advisories for all species of shellfish, crab, bottom fish, and rockfish in Dyes and Sinclair Inlets due to chemical or biological pollution. Most of Dyes and Sinclair Inlets are closed to commercial harvesting of shellfish due to point and non-point source pollution; impacting the economy, reducing jobs, and causing the public to avoid use of the beaches. Additionally, these basins are critical near-shore salmonid

habitats. A report specifically cites CSOs in the project area as problems because they decrease dissolved oxygen and increase pollutants and fecal coliform leading to reduced eel grass beds and increased algae blooms that are critical to salmonid habitats.

- These Inlets also have year round recreational uses that include sport fishing, scuba diving, and swimming, as well as significant public use including four major waterfront parks and more than seven other public accesses to the waterway.

City of Camas Street 2003

- The City of Camas is on the 2003 list of projects and has requested \$3,000,000 for the design/engineering and right-of-way acquisition for the SE 1st Street project. The project will replace 2.1 miles of the inadequate rural standard SE 1st Street, with a safe major arterial street built to current urban standards.
- The project will facilitate further important economic development in Camas' light industrial area. The city conservatively estimates that within 3 ½ years, a minimum of an additional \$200 million will be privately invested in the area and in three to five years, upwards of 300 new jobs will be created in the area the street serves.

City of Cle Elum Sanitary Sewer 2003

- The City of Cle Elum is on the 2003 list of projects and has requested \$1,000,000 for the construction of a new regional wastewater treatment facility that will serve the City of Cle Elum and

the Town of South Cle Elum. The improvements are necessary in order to meet state wastewater discharge permit limits and to serve future growth including the planned Trendwest developments within Cle Elum's Urban Growth Area and the Mountain Star Master Plan Resort.

- Trendwest Investment Inc. has proposed a 1,100-acre development that would consist of 810 single-family residential units, 524 multi-family residential units, and 80-acre business park, and recreational areas. Trendwest is also proposing a 6,225-acre destination resort that will consist of 4,100 residential units, commercial and retail facilities, 300 acres of golf courses, and 50 acres of parks, recreational areas, and open spaces. These two developments are projected to create nearly 800 construction related jobs within three years and over 1,000 jobs within the resort and business park within five years. The Trendwest project depends on the construction of the regional wastewater treatment facility.

Douglas County Sewer District No. 1
Sanitary Sewer
2003

- The Douglas County Sewer District No. 1 is on the 2003 list of projects and has requested \$1,936,050 for a sewer interceptor, force and gravity main, and lift station connecting the Pangborn Airport Business Park to the sewer system.
- This project will spur economic growth for Douglas County by providing the "missing piece" of infrastructure needed for development of the only industrially zoned acreage within the district's service area, a 650 acre large industrial area capable of attracting industry and providing family wage jobs. It is expected that a minimum of ten businesses will relocate to this area within a ten-year period following project

completion with the creation of at least 500 new jobs.

City of Grandview
Water/Sanitary Sewer/Streets
2002

- The City of Grandview received a Pre-Construction loan of \$150,000 for water, sewer, and street improvements that will provide service to, and open for development, approximately 370 acres of commercial/industrial property.
- The improvements are required in order for a 900,000 square foot regional distribution warehouse to locate in Grandview. The distribution warehouse will generate 400 immediate jobs and an estimated 200 future jobs for the city and surrounding area. In addition, approximately 250 acres of adjacent undeveloped property may be served by these infrastructure improvements.

City of Kalama
Water
1997

- The City of Kalama received a Timber Rural Natural Resources loan of \$851,878 for a new two million gallon reservoir and associated site piping to connect to the existing distribution system.
- The additional storage was needed to accommodate the needs of BHP Steel, which created approximately 400 jobs and uses approximately 400,000 gallons of water per day. The reservoir also supplemented the community's emergency storage for the entire system and fire protection capacity for existing users and future industrial clients in the North Port area.

City of Kelso
Bridge
1998

- The City of Kelso received a Construction loan of \$5,051,000 for replacing the sub-standard, deteriorated two-lane Allen Street Bridge with a multi-modal four-lane bridge over the Burlington Northern Railroad and the Cowlitz River.
- The Allen Street Bridge is one of three Cowlitz River crossings serving the Longview-Kelso urban area. The average daily traffic for the old bridge was 23,500. A ten-ton load limit had been placed on the bridge due to load cycles and structure deterioration. In the winter of 1995-1996, the bridge was closed twice for public safety and flood protection. The new bridge also provided a grade separation from the railroad, which the old bridge did not have.
- The ability to move goods and services by truck freight was expected to essentially double and was anticipated to encourage growth in the vicinity of the corridor. Local transit and bus lines returned to the corridor and access from the freeway to downtown Kelso was enhanced. The ability to move people and freight more safely and efficiently was expected to encourage tourism, recreation, and general commercial activities. Also, the speed and efficiency of passenger and freight trains was increased since the grade intersection was eliminated.

Lake Chelan Reclamation District
Sanitary Sewer
2003

- The Lake Chelan Reclamation District is on the 2003 list of projects and has requested \$5,376,050 for the rehabilitation of a sewer interceptor to improve reliability of pumps and pipelines. This project will replace the existing pipelines and pumps and will

significantly improve system performance, preventing spills into Lake Chelan, thereby protecting the environment and the public drinking water supply for over 6,000 permanent residents and up to 30,000 people during peak summer visitor days. Lake Chelan has also been identified as having threatened bull trout that are being protected under the Endangered Species Act.

- The project will provide a reliable system and provide for economic development for the next 20-year planning period. It will assist the local economy in shifting from an agricultural-based economy to a tourism-based economy, which revolves around water and sewer availability.

Snohomish County
Road
1998

- Snohomish County received a Construction loan of \$500,000 to relocate 8,000 feet of the Lowell-Snohomish River Road several hundred feet inland. The new section of road is situated on top of a relocated levee.
- The project was designed as a long-term solution to mitigate flooding and road-washout problems on the Lowell-Snohomish River Road. Previous breaching of the dike system caused disruptions to several businesses in the area, including an airport, a mill, and an ironworks, as well as the Burlington Northern Railroad. The road also re-opened direct access from the City of Everett to the City of Snohomish.

City of Sumner
Sanitary Sewer
2002

- The City of Sumner received a Construction loan of \$4,892,800 for replacing obsolete and deteriorated

equipment and processes, add new processes to meet new water quality requirements, and add facilities to increase plant capacity from 2.62 to 4.59 million gallons per day. The Cities of Sumner and Bonney Lake are joint partners in the wastewater treatment plant in Sumner. The Department of Ecology had imposed permit limitations on the wastewater treatment plant.

- The project expanded sewer service, improved treatment levels, added back up systems, and reduced odors. The Sumner/Bonney Lake area continues to have rapid growth, and this project will allow the area to meet the sewer needs for the foreseeable future. The population of Sumner grew 34 percent from 6,459 in 1990 to an estimated 2002 population of 8,670. The population of Bonney Lake grew 65 percent from 7,494 in 1990 to an estimated 2002 population of 12,360.

Cities of Tacoma & Kent, Lakehaven Utility District & Covington Water District
Water
2000 to 2002

- These four jurisdictions received Pre-Construction and Construction loans totaling \$77,400,000 for the Second Supply Pipeline, a regional drinking water supply project from Green River, which includes 42 miles of transmission main, river diversion modifications, additional storage, water treatment facilities, and environmental enhancement projects.
- Project participants also include other water purveyors in Pierce County (the Cities of Puyallup, Fife, Bonney Lake, and possibly Buckley together with several private and mutual water companies) and will receive water from Tacoma's portion of available water through wholesale agreements.
- The Second Supply Project is needed to provide a new, reliable source of drinking water to meet the regional

demands of south King and Pierce Counties. The smaller water systems of Kent and Lakehaven will have building moratoriums in the next few years without this new source of water. Covington Water District halted giving new water connections in their service area from February 1995 to December 1999 because of the water shortage. Without the new water supply, they will have to reinstate the moratorium in the next few years.

City of White Salmon
Water
1997

- The City of White Salmon received a Timber Rural Natural Resources loan of \$450,000 for correcting inadequacies in water quality, storage capacity, distribution, and water pressure. This was accomplished by drilling two test wells, constructing three 100,000-gallon storage tanks with telemetry, and installing chlorination and electrical equipment. It also replaced distribution lines and connections to allow for new additions to the system. The water improvements benefited the Cities of White Salmon and Bingen, as well as the Port of Klickitat.
- The project immediately improved public health and safety by improving water quality for the communities. It also provided critical infrastructure service for economic growth in the area. An estimated 200 direct jobs with wages in the \$10 per hour range were created between 1999 and 2001, along with some 100 indirect jobs.

Yakima County
Bridges
1999

- Yakima County received a Construction loan of \$5,000,000 for reconstructing 18 county bridges. The project included the reconstruction of approach roadways to match the new bridge configurations, guardrail, the

replacement and/or modification of drainage facilities, and other items relative to bridge construction projects.

- An analysis of all 312 county bridges in 1996 and 1997 determined that 32 bridges were structurally deficient, and the county placed load restrictions on these bridges, thereby limiting the types and weights of vehicles permitted to cross the structures. Approximately 300 square miles of lower valley farmland were adversely affected by the load

limits, preventing trucks and farm equipment from using the transportation system effectively and efficiently. The detour lengths to bypass the bridges varied from 2 to 17 miles, with an average of 5 miles. These detours increased the travel time from field to market or cold storage, thereby increasing labor, fuel, and equipment costs, and decreasing the quality and value of the crops.

Appendix A

Implan Washington Description and Modeling Assumptions

An economic impact analysis of the 2003 Project List, as shown in Appendix C, was performed by DOR using the Washington State Implan model from Minnesota Implan Group Inc. whose regional input-output models are commonly used in the U.S.

Implan allows the user to construct regional input-output models, which are used primarily for two functions: 1) as a descriptive tool to explore the interrelationships and interdependence among economic actors; and 2) to estimate the effects upon an economy of outside changes to final demand. Final demand includes spending at the household, local, state and federal levels, as well as exports to domestic and foreign markets.

During an impact analysis, regional purchase coefficients (RPC's) within the model distribute expenditures based upon the availability of locally-supplied labor and materials inputs. National industry production functions are scaled-down using state and county-level data to create the RPC's, and thus approximate the purchasing patterns of regional industries.

One of the strengths of Implan Washington is its ability to derive sectorally-specific multipliers for common impact variables such as *Industrial Output, Employee Compensation, Value Added, and Employment*. Contained within Implan Washington, these multipliers allow an analyst to "shock" the regional economy by specifying various changes to final demand. Depending on the type of multiplier, the resulting output expresses the estimated total direct, indirect, and induced one-time impacts for the above-mentioned variables to the regional economy.

Methodology Used for This Report

The estimated impacts are consequences only of the planned spending on infrastructure. The analysis does not include potential impacts from having greater water and sewer capacity or

more efficient services. To determine the impact on the wider economy, it was necessary to make several assumptions concerning how the money would be spent, as detailed below.

- I. The 2003 Project List was parsed into two periods based on completion dates, 2003-05 and 2006-07.
- II. For both of those periods:
 1. Expenditures are identified as purchases from either the public or private sectors;
 - a. Assume that the engineering report & environmental review are private (or, that the impact is the same regardless),
 - b. Assume that public information and bid documents are 50% public, 50% private,
 - c. Assume that all permits and fees are purchased from the public sector,
 2. Public and private expenditures are identified as either construction or services;
 - a. Private expenditures that are not construction are spent on services,
 - b. All public sector expenditures are services,
 - c. Contingency funds are assumed to be spent; they are apportioned into private (construction or services) and public (service) based on total spending patterns,
 3. Land acquisition is not included as an expenditure.

Applying these assumptions to planned expenditures yields the following:

| Project Completion Date | <u>2003-2005</u> | <u>2006-2007</u> |
|---------------------------------|-------------------|------------------|
| Expenditures on: | | |
| Construction | \$75,781,490 | \$33,573,352 |
| Private Services | 6,738,763 | 4,491,115 |
| Public Services | <u>17,224,116</u> | <u>992,533</u> |
| Total Expenditures | \$99,744,369 | \$39,057,000 |
| Land Acquisition (not included) | <u>7,386,000</u> | <u>303,000</u> |
| Total Project Cost | \$107,130,369 | \$39,360,000 |

Results

The input-output model estimates the total amount of goods and services, including labor, which the economy requires to meet these expenditures. These are the final impacts on the economy. The final impacts include the initial spending; they are not in addition to the initial expenditures.

Gross economic impact statewide:

| Project Completion | 2003-2005 | 2006-2007 | Total |
|--|-----------|-----------|-------|
| Employment (full time) | 2,430 | 920 | 3,350 |
| Economic Activity (output) in millions | \$233 | \$96 | \$329 |

People often want to know what the "multiplier" is for a project. For these projects, the output multipliers are $233/100 = 2.34$, and $96/39 = 2.46$ (not including land acquisition expenses).

The employment impacts are on a full-time basis. However, keep in mind that the impact of construction activity is generally transitory. People and businesses are employed for the duration of the project; they in turn spend their income causing the "multiplier" effect. Once the project is complete, this new spending stream is gone and one can expect most of the new jobs to fade away.

Analysts typically expect most new employment to show up within two years or so, a little faster for construction projects. Since the completion dates span 2003 to 2007, the employment impacts can be expected between approximately 2003 and 2008, or some 670 per year on average. In the tables above, the impacts arising from the two groups of projects, 2003-05 and 2006-07, are added together for the total. One has to keep in mind, however, that the jobs resulting from early projects are disappearing while the jobs for new projects are just getting underway. Hence, there is no period of time where all 3,350 jobs will exist simultaneously, as there would be if this were one big project.

Caveats

This analysis looks at the investment projects themselves and not at any future benefits that may accrue from the infrastructure. It is a statewide analysis, no attempt is made to isolate local effects. Finally, it should be noted that input-output analysis models an increase in expenditures, it is often used when an outside entity plans a new facility in a region. However, if the "new" expenditures modeled are primarily shifting resources from one pocket to another, then the impact may be much smaller.

Methodology for Applying 2003 Impacts to the Entire Public Works Trust Fund, as Performed by the Public Works Board staff

- For each year, the total funding (PWTF loan amount plus other funds) was converted to 2002 dollars.
- The 2002-dollar amounts for each year were then multiplied by the figure above for the 2003 – 2005 Economic Activity (2.34) to reach the Total Economic Output for each year.
- The 2002-dollar amounts for each year were also multiplied by a factor calculated from the projected employment from the 2003 Loan List.

Appendix B

Annual Public Works Trust Fund Activity Within Each County

| County (2) | 1986 (3) | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 (4) | Totals |
|--------------|----------|---------|---------|----------|----------|----------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| Adams | \$0 | \$0 | \$0 | \$573 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,756 | \$0 | \$2,393 | \$0 | \$0 | \$385 | \$0 | \$0 | \$6,107 |
| Asotin | \$102 | \$379 | \$0 | \$0 | \$0 | \$2,761 | \$1,028 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,250 | \$0 | \$1,620 | \$0 | \$0 | \$0 | \$7,140 |
| Benton | \$1,000 | \$1,000 | \$872 | \$1,485 | \$2,368 | \$2,500 | \$3,500 | \$1,293 | \$1,313 | \$0 | \$7,000 | \$0 | \$3,817 | \$0 | \$14,400 | \$3,323 | \$1,683 | \$10,555 | \$56,109 |
| Chelan | \$0 | \$396 | \$949 | \$350 | \$0 | \$2,500 | \$0 | \$2,405 | \$3,487 | \$0 | \$791 | \$3,306 | \$470 | \$2,655 | \$363 | \$4,969 | \$0 | \$6,691 | \$29,332 |
| Clallam | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,500 | \$788 | \$760 | \$0 | \$240 | \$0 | \$0 | \$911 | \$0 | \$3,100 | \$0 | \$340 | \$0 | \$8,639 |
| | | | | | | | | | | | | | | | | | | | |
| Clark | \$0 | \$1,000 | \$2,088 | \$2,550 | \$1,899 | \$2,743 | \$3,550 | \$1,080 | \$99 | \$2,186 | \$4,212 | \$0 | \$0 | \$3,582 | \$4,565 | \$4,504 | \$11,523 | \$6,400 | \$52,381 |
| Columbia | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,550 | \$0 | \$0 | \$494 | \$0 | \$0 | \$3,044 |
| Cowlitz | \$188 | \$1,157 | \$1,662 | \$628 | \$1,662 | \$0 | \$0 | \$1,375 | \$632 | \$285 | \$155 | \$1,892 | \$5,051 | \$11,272 | \$2,388 | \$8,842 | \$0 | \$492 | \$37,681 |
| Douglas | \$0 | \$0 | \$0 | \$0 | \$0 | \$891 | \$1,049 | \$0 | \$0 | \$0 | \$3,500 | \$0 | \$0 | \$0 | \$608 | \$0 | \$0 | \$1,936 | \$7,984 |
| Ferry | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| | | | | | | | | | | | | | | | | | | | |
| Franklin | \$0 | \$0 | \$220 | \$1,245 | \$0 | \$2,500 | \$0 | \$0 | \$0 | \$3,500 | \$0 | \$0 | \$0 | \$0 | \$2,100 | \$0 | \$0 | \$0 | \$9,565 |
| Garfield | \$0 | \$30 | \$0 | \$61 | \$0 | \$0 | \$0 | \$76 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$167 |
| Grant | \$256 | \$0 | \$0 | \$537 | \$1,882 | \$0 | \$1,200 | \$0 | \$0 | \$1,500 | \$0 | \$450 | \$723 | \$0 | \$0 | \$0 | \$11,387 | \$0 | \$17,935 |
| Grays Harbor | \$1,242 | \$0 | \$648 | \$66 | \$0 | \$1,099 | \$0 | \$0 | \$627 | \$0 | \$1,000 | \$4,000 | \$7,000 | \$0 | \$0 | \$0 | \$5,652 | \$0 | \$21,334 |
| Island | \$450 | \$259 | \$147 | \$0 | \$89 | \$215 | \$0 | \$988 | \$0 | \$796 | \$1,926 | \$0 | \$669 | \$366 | \$0 | \$677 | \$0 | \$0 | \$6,582 |
| | | | | | | | | | | | | | | | | | | | |
| Jefferson | \$660 | \$0 | \$0 | \$0 | \$0 | \$338 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,376 | \$1,594 | \$0 | \$2,401 | \$1,308 | \$0 | \$8,677 |
| King | \$2,561 | \$3,968 | \$6,089 | \$10,924 | \$10,317 | \$16,142 | \$8,414 | \$14,550 | \$22,840 | \$22,393 | \$25,816 | \$12,403 | \$24,636 | \$13,194 | \$34,071 | \$61,465 | \$51,811 | \$21,301 | \$362,895 |
| Kitsap | \$252 | \$0 | \$398 | \$0 | \$0 | \$4,098 | \$585 | \$582 | \$3,805 | \$8,708 | \$3,468 | \$662 | \$3,150 | \$3,832 | \$10,795 | \$7,720 | \$10,000 | \$2,026 | \$60,081 |
| Kittitas | \$0 | \$210 | \$280 | \$138 | \$331 | \$277 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,425 | \$1,000 | \$3,661 |
| Klickitat | \$74 | \$0 | \$347 | \$1,464 | \$258 | \$875 | \$0 | \$0 | \$0 | \$269 | \$0 | \$0 | \$0 | \$1,213 | \$2,124 | \$10,000 | \$0 | \$0 | \$16,624 |
| | | | | | | | | | | | | | | | | | | | |
| Lewis | \$100 | \$284 | \$0 | \$0 | \$1,279 | \$0 | \$2,511 | \$1,786 | \$876 | \$754 | \$724 | \$0 | \$1,852 | \$0 | \$400 | \$1,592 | \$3,374 | \$0 | \$15,532 |
| Lincoln | \$0 | \$0 | \$0 | \$0 | \$366 | \$0 | \$100 | \$487 | \$1,008 | \$0 | \$765 | \$0 | \$903 | \$0 | \$0 | \$0 | \$0 | \$0 | \$3,629 |
| Mason | \$58 | \$346 | \$0 | \$1,170 | \$0 | \$427 | \$3,500 | \$0 | \$0 | \$0 | \$159 | \$1,152 | \$3,297 | \$0 | \$0 | \$0 | \$0 | \$0 | \$10,109 |
| Okanogan | \$448 | \$0 | \$101 | \$199 | \$0 | \$0 | \$0 | \$1,806 | \$502 | \$0 | \$0 | \$0 | \$4,362 | \$0 | \$2,280 | \$166 | \$1,103 | \$0 | \$10,967 |
| Pacific | \$36 | \$750 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$261 | \$0 | \$0 | \$194 | \$1,160 | \$1,310 | \$180 | \$1,598 | \$0 | \$0 | \$5,489 |
| | | | | | | | | | | | | | | | | | | | |
| Pend Oreille | \$0 | \$140 | \$0 | \$0 | \$0 | \$300 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$440 |
| Pierce | \$289 | \$344 | \$92 | \$536 | \$0 | \$709 | \$3,500 | \$2,322 | \$0 | \$458 | \$5,525 | \$11,036 | \$11,207 | \$1,452 | \$7,072 | \$13,429 | \$24,489 | \$7,175 | \$89,635 |
| San Juan | \$703 | \$0 | \$0 | \$0 | \$0 | \$670 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$3,560 | \$2,000 | \$6,933 |
| Skagit | \$1,000 | \$1,000 | \$1,319 | \$40 | \$309 | \$545 | \$0 | \$351 | \$322 | \$0 | \$3,500 | \$0 | \$1,538 | \$557 | \$0 | \$12,300 | \$10,000 | \$1,000 | \$33,781 |

| County (2) | 1986 (3) | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 (4) | Totals |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|-----------|-----------|-----------|----------|-------------|
| Skamania | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| | | | | | | | | | | | | | | | | | | | |
| Snohomish | \$117 | \$0 | \$2,681 | \$4,167 | \$3,332 | \$6,134 | \$3,752 | \$8,616 | \$5,262 | \$3,791 | \$9,998 | \$5,285 | \$6,344 | \$9,628 | \$16,320 | \$7,554 | \$41,843 | \$5,490 | \$140,314 |
| Spokane | \$3,453 | \$1,850 | \$1,169 | \$1,304 | \$927 | \$3,890 | \$2,883 | \$5,395 | \$1,684 | \$6,124 | \$3,759 | \$9,048 | \$7,172 | \$0 | \$877 | \$6,113 | \$2,388 | \$1,778 | \$59,814 |
| Stevens | \$0 | \$0 | \$369 | \$0 | \$1,568 | \$788 | \$374 | \$1,084 | \$0 | \$0 | \$7,000 | \$0 | \$67 | \$1,782 | \$0 | \$0 | \$0 | \$0 | \$13,032 |
| Thurston | \$966 | \$135 | \$1,123 | \$1,152 | \$2,134 | \$1,476 | \$565 | \$2,082 | \$408 | \$0 | \$0 | \$0 | \$5,153 | \$0 | \$6,721 | \$3,275 | \$0 | \$0 | \$25,190 |
| Wahkiakum | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,749 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,749 |
| | | | | | | | | | | | | | | | | | | | |
| Walla Walla | \$0 | \$0 | \$114 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$7,000 | \$7,000 | \$0 | \$800 | \$5,159 | \$0 | \$20,073 |
| Whatcom | \$0 | \$1,123 | \$1,828 | \$1,000 | \$1,235 | \$46 | \$1,256 | \$300 | \$315 | \$0 | \$1,674 | \$3,244 | \$4,755 | \$0 | \$0 | \$726 | \$9,192 | \$0 | \$27,094 |
| Whitman | \$0 | \$699 | \$449 | \$527 | \$0 | \$645 | \$0 | \$0 | \$168 | \$0 | \$977 | \$217 | \$117 | \$860 | \$0 | \$394 | \$0 | \$0 | \$5,053 |
| Yakima | \$1,895 | \$607 | \$2,166 | \$5,536 | \$1,711 | \$2,343 | \$1,120 | \$3,222 | \$1,481 | \$4,968 | \$6,436 | \$0 | \$0 | \$11,356 | \$8,904 | \$10,511 | \$1,336 | \$3,823 | \$67,415 |
| | | | | | | | | | | | | | | | | | | | |
| Totals | \$15,850 | \$15,677 | \$25,111 | \$35,652 | \$31,667 | \$57,812 | \$39,675 | \$50,560 | \$45,490 | \$55,972 | \$92,890 | \$52,889 | \$109,923 | \$71,653 | \$118,888 | \$163,238 | \$197,573 | \$71,667 | \$1,252,187 |

Appendix C

Public Work Trust Fund

Recommended 2003 Construction Loan List

Section 1 (Alpha order)

| Jurisdiction | County | Project Name | Project Type | Loan Request | Other Funds | Total Project Cost |
|---------------------------------|---------|---------------------------------------|--------------|---------------------|--------------------|---------------------|
| Annapolis Water District | Kitsap | Well 6 & 7 Decommissioning | Water | \$318,750 | \$56,250 | \$375,000 |
| Clark County | Clark | Reconstruction Of NW 117/119th St. | Road | \$1,400,000 | \$5,760,500 | \$7,160,500 |
| Highline Water District | King | 2003 Water System Improvement Project | Water | \$749,700 | \$920,300 | \$1,670,000 |
| Karcher Creek Sewer District | Kitsap | Crownwood Lift Station | Sewer | \$425,000 | \$75,000 | \$500,000 |
| Puyallup | Pierce | 39th Avenue SE at Meridian | Road | \$6,000,000 | \$670,000 | \$6,670,000 |
| Selah | Yakima | Biosolids Treatment Facility | Sewer | \$1,128,400 | \$483,600 | \$1,612,000 |
| Williams Lake Sewer District #2 | Spokane | East End Williams Lake SS System | Sewer | \$876,800 | \$523,200 | \$1,400,000 |
| Yakima | Yakima | Naches River WTP Improvement | Water | \$2,694,500 | \$475,500 | \$3,170,000 |
| Total Section 1: | | | | \$13,593,150 | \$8,964,350 | \$22,557,500 |

Section 2 - Supplemental Request (ranked order)

| Jurisdiction | County | Project Name | Project Type | Loan Request | Other Funds | Total Project Cost |
|--|-----------|--|--------------|---------------------|---------------------|----------------------|
| Friday Harbor | San Juan | Construct New WWT Plant Phase II | Sewer | \$2,000,000 | \$4,910,000 | \$6,910,000 |
| Lake Chelan Reclamation Dist | Chelan | Northshore Sewer Interceptor Replacement | Sewer | \$5,376,050 | \$1,816,950 | \$7,193,000 |
| Val Vue Sewer Dist | King | 2003 Sanitary Sewer System Improvements | Sewer | \$1,301,350 | \$229,650 | \$1,531,000 |
| Spokane | Spokane | Central Business District Main Line Rehabilitation | Sewer | \$901,000 | \$159,000 | \$1,060,000 |
| Karcher Creek Sewer Dist | Kitsap | Beach Drive Pump Station Collection System | Sewer | \$807,500 | \$142,500 | \$950,000 |
| Mount Vernon | Skagit | WWTP Outfall Improvements | Sewer | \$1,000,000 | \$221,000 | \$1,221,000 |
| Camas | Clark | Camas SE 1st Street Project | Road | \$3,000,000 | \$7,677,444 | \$10,677,444 |
| Richland | Benton | Water Main Replacement | Water | \$8,755,000 | \$1,545,000 | \$10,300,000 |
| Everett | Snohomish | Pumped Effluent To Deepwater Outfall | Sewer | \$5,490,000 | \$2,070,000 | \$7,560,000 |
| Cle Elum | Kittitas | Regional WWTF Improvement | Sewer | \$1,000,000 | \$12,500,000 | \$13,500,000 |
| Douglas Co. Sewer Dist 1 | Douglas | Grant Rd Sewer Ext & Business Park Sewer | Sewer | \$1,936,050 | \$623,950 | \$2,560,000 |
| Peshastin Water Dist | Chelan | Domestic Water System Replacement Project | Water | \$1,314,600 | \$1,659,760 | \$2,974,360 |
| Seattle | King | Fremont Bridge Approaches | Bridge | \$10,000,000 | \$18,000,000 | \$28,000,000 |
| Bremerton | Kitsap | Anderson Cove Basin 12 CSO Reduction | Sewer | \$475,000 | \$25,000 | \$500,000 |
| Cowlitz County PUD 1 | Cowlitz | Woodbrook's Distribution /Reservoir Roofs Replace | Water | \$491,661 | \$86,764 | \$578,425 |
| Bonney Lake | Pierce | Spring Sources Water Quality Treatment Facilities | Water | \$1,174,700 | \$207,300 | \$1,382,000 |
| Battle Ground | Clark | West Main Street Reconstruction | Road | \$2,000,000 | \$6,250,000 | \$8,250,000 |
| Enumclaw | King | Wastewater Treatment Plant Upgrade/Expansion | Sewer | \$9,250,000 | \$6,012,000 | \$15,262,000 |
| West Richland | Benton | Sewer Interceptor-North Treatment Plant | Sewer | \$1,800,000 | \$2,070,000 | \$3,870,000 |
| Total Section 2 – Supplemental Request: | | | | \$58,072,911 | \$66,206,318 | \$124,279,229 |



Administrative Services Provided by the Office of Community Development